



JC10 Rec'd PCT/PTO 26 MAY 2005  
PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Masaaki YOSHIKAWA et al. : **Mail Stop: PCT**  
Serial No. 10/529,552 : Attorney Docket No. 2005\_0460A  
Filed March 29, 2005 :

NOVEL USES OF PROSTAGLANDIN D<sub>2</sub>,  
PROSTAGLANDIN D<sub>2</sub> AGONIST AND  
PROSTAGLANDIN D<sub>2</sub> ANTAGONIST  
[Corresponding to PCT/JP2003/007837  
Filed June 20, 2003]

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication;
- ☐ each reference previously cited in the international application  
PCT/\_\_\_\_\_; and/or
- ☐ each reference previously cited in prior parent application Serial No.  
\_\_\_\_\_.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the  
above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or


b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Masaaki YOSHIKAWA et al.

By



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May 26, 2005

## INFORMATION DISCLOSURE STATEMENT

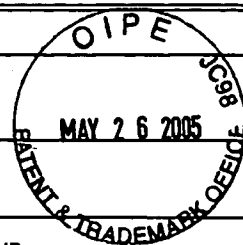
FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: May 26, 2005

ATTY DOCKET NO.  
2005\_0460ASERIAL NO.  
10/529,552APPLICANT  
Masaaki YOSHIKAWA et al.FILING DATE  
March 29, 2005

GROUP



## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
/AH/	AC	98/25919	6/1998	WO			
/AH/	AD	0 284 202	9/1988	EP			
	AE						
	AF						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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/AH/	AH	C. T. Beuckmann et al., "Cellular Localization of Lipocalin-Type Prostaglandin D Synthase ( $\beta$ -Trace) in the Central Nervous System of the Adult Rat", The Journal of Comparative Neurology, Vol. 428, pp. 62-78, 2000.
/AH/	AI	O. Hayaishi et al., "Molecular mechanisms of sleep-wake regulation: roles of prostaglandins D <sub>2</sub> and E <sub>2</sub> ", The FASEB Journal, Vol. 5, pp. 2575-2581, 1991.
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/AH/	AK	Y. Urade et al., "Prostaglandin D <sub>2</sub> and sleep regulation", Biochimica et Biophysica Acta, Vol. 1436, pp. 606-615, 1999.
/AH/	AL	N. Eguchi et al., "Lack of tactile pain (allodynia) in lipocalin-type prostaglandin D synthase-deficient mice", Proc. Natl. Acad. Sci., Vol. 96, pp. 726-730, January 1999.
/AH/	AM	M. K. Hellerstein et al., "Interleukin-1-induced Anorexia in the Rat", J. Clin. Invest., Vol. 84, pp. 228-235, July 1989.
/AH/	AN	A. Terao et al., "Interleukin-1 Induces Slow-Wave Sleep at the Prostaglandin D <sub>2</sub> Sensitive Sleep-Promoting Zone in the Rat Brain", The Journal of Neuroscience, Vol. 18, No. 16, pp. 6599-6607, August 15, 1998.

EXAMINER

/Alicia Hughes/

DATE CONSIDERED

08/18/2008